



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,256	12/07/2000	Peter Leslie Hart	BKR-21102/01	5947

7590 11/23/2004

Douglas W Sprinkle  
Suite 400  
280 N Woodward  
Birmingham, MI 48009

EXAMINER

ADDIE, RAYMOND W

ART UNIT	PAPER NUMBER
----------	--------------

3671

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/719,256		HART, PETER LESLIE <span style="float: right;">S</span>	
	<b>Examiner</b>		<b>Art Unit</b>	
	Raymond W. Addie		3671	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4,6,7 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,6,7 and 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on 5/20/04, PROSECUTION IS HEREBY REOPENED. A New Grounds of Rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 16 both require the block to be made from a material that is impermeable or from an impermeable material. However, the claims do not disclose what the material is intended to be impermeable to. Is the material impermeable to water, acid, sand or gasoline?

For examination purposes the limitation is seen to require a block made from concrete.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al. # 5,051,023.

Yoshida et al. discloses a paving stone (1) made of concrete comprising:

An upper planar surface (5) and a lower surface (1-1) spaced from and generally parallel to said upper planar surface (1-2).

A lateral surface (1) extending between said upper and lower surfaces, on each side of the block.

Wherein said lateral surfaces (1) having a planar lower portion disposed perpendicular to said upper and lower surfaces, and an associated upper tapered planar (2) portion.

Further wherein said upper tapered portion of each lateral surface having a lower edge which intersects and terminates at an upper edge of its associated lower portion of said lateral surface. Although Yoshida et al. does not explicitly recite the angular extent of the upper tapered planar portion (2), Yoshida et al., explicitly recites "The lateral margin (2) can be substantially horizontal or can be inclined in a sloping or round fashion and clearly illustrates in Fig. 4B the angular extent of the tapered portion (2) is approximately 15°.

Art Unit: 3671

Still further Yoshida et al. discloses an additional tapered portion (4) which can be rounded or inclined and explicitly recites "the horizontal distance (L4) of the beveling or round corners being substantially zero to a few millimeters". Therefore, it is inherent that Yoshida et al. contemplates the inclined surfaces (2) could be between zero and 15°. See Col. 3, Ins. 1-33.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 7, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barth et al. # 5,797,698 in view of Yoshida et al. # 5051023.

Barth et al. discloses a paving stone (2) having interconnected lateral sides (4), which are capable of being disposed adjacent lateral sides (4) of similar paving stones (2), for the intended use in building streets, roads & court yards. See col. 1, Ins. 12-31.

Said paving stones comprising:

Parallel, planar, opposing upper & lower surfaces (6).

Said lateral surfaces (4) extending between said upper and lower surfaces (6) and further comprising: a vertical planar lower portion for being disposed adjacent

Art Unit: 3671

neighboring stones (2), and an upper tapered portion (22). See col. 2, Ins. 31-44; col. 3, Ins. 35-47.

At least one recess (10a-d, 20), having a width greater than its depth, disposed in each lateral surface (4).

Wherein said upper tapered portion of each lateral surface, further has a lower edge which intersects and terminates at an associated upper edge of said vertical planar lower side. Although Barth et al. does not explicitly recite an angular range of intersection between the associated edges; Barth et al. does disclose the beveled portion (22) for "for both functional and aesthetic reasons...bevel 22 aids in directing water from the top surface (6) of the stones (2)".

Further, Yoshida et al. teaches a fracture-free paving block having upper and lower planar surfaces and vertically oriented side walls (1-1). Yoshida et al. further teaches it is desirable to provide a tapered portion (2) between the upper planar and vertically oriented sidewalls (1-1), the tapered portion being between zero and a few millimeters. Although Yoshida et al. does not disclose an angular extent of the tapered portion, Fig. (4B) clearly illustrate the angle of the tapered portion is approximately  $15^{\circ}$ .

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to form the tapered portion of the paving stone of Barth et al., with a tapered portion between  $0-15^{\circ}$ , as reasonably suggested by Yoshida et al. in order to enhance the visual appearance of the paving block, as taught by Barth et al. See Barth et al., col. 3, Ins. 36-48; Yoshida et al. Col. 3, Ins. 1-27; Figs. 2a, 2b.

In regards to Claim 2 Barth et al. discloses the tapered portion (L6) of each lateral surface extends between 5-50mm and the height of the vertical portion (L3) of each lateral surface extends between 3-20cm, such that the tapered portion (L6) extends over 10%-90% of the entire height of the lateral surface. See Col. 3, Ins. 1-23(L6 is mistyped as L8).

In regards to Claim 4, Barth et al. discloses all the lateral sides of the paving block are provided with at least one channel therein. See Fig. 1-14, Figs. 24-27.

In regards to Claim 6 although Barth et al. does not disclose the depth of each recess (10); Barth et al. explicitly recites "the individual cross-sections (of the recess 10) can be made so small that even shoes with stiletto heels no longer run the risk of sinking in and getting stuck (in the recesses 10). Therefore, it would be obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving stone of Barth et al., with recesses that are not greater than about 5mm, as reasonably suggested by Barth et al., in order to prevent injury to people wearing narrow heeled shoes; as explicitly recited by Barth et al. See col. 2, ln. 64-col. 3, ln. 7.

In regards to Claim 7 Barth et al. discloses the paving blocks are made from an impermeable material, such as concrete.

In regards to Claims 17, 19 Barth et al. discloses a paving block having a tapered portion disposed between a planar top surface and a planar, vertically oriented lateral surface, but does not disclose providing a beveled edge portion at a common edge with said tapered portion of said lateral surface. However, Yoshida et al. teaches additional embodiments of the patented paving block, wherein the upper surface of the block (1) has a beveled edge portion (4) around its periphery at a common edge with said tapered portion (2). See Fig. 4B. Yoshida et al. further teaches the paving stone may optionally be provided with a shoulder portion (unnumbered), having a surface generally parallel to said upper surface and separates said tapered surface portion (2) from said beveled edge portion (4). See Fig. 4C, 4D. Wherein the beveled portion (4) is inclined with respect to said lateral surface at a greater angle than said tapered portion (2) thereof. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the paving stone of Barth et al., with beveled portions and shoulder portions, as taught by Yoshida et al. in order to enhance the visual appearance of the paving block. As taught by Yoshida et al. See col. 3, Ins. 1-33.

In regards to Claim 18 Barth et al. discloses a paving block having a tapered portion disposed between a planar top surface and a planar, vertically oriented lateral surface,



but does not disclose providing a beveled edge portion at a common edge with said tapered portion of said lateral surface. However, Yoshida et al. teaches additional embodiments of the patented paving block, wherein the upper surface of the block (1) has a beveled edge portion (4) around its periphery at a common edge with said tapered portion (2). Such that the beveled edge portion can be rounded or inclined, such that the angular orientation of the beveled edge portion (4) measures between 30 and 40°. See Fig. (4A).

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 2, 4, 6, 7, 16-21 have been considered but are moot in view of the new ground(s) of rejection.

However, Since the reference to Barth et al. is reused in the New Grounds of Rejection the arguments directed against the reference to Barth et al. will be addressed.

Specifically Applicant argues "Claims 20, 21 require the plane of the upper tapered portion to intersect the plane of its associated lower portion at an angle greater than 0° and less than 15°... Barth does not teach a paving block having the upper tapered portion intersecting the lower planar portion at an angle greater than 0° and less than 15°".

However, Barth et al. explicitly recites the upper edge of the sides (4) of the stones (2)...May optionally include a bevel (22), this being used for both functional and aesthetic reasons. Hence, Barth et al. clearly discloses a lower most angular range of the bevel (22) as being 00 if the bevel does not exist, and at least 1 degree if the bevel is provided in the alternative embodiment put forth in the Last Office Action.

However, Barth et al. provides no indication nor disclosure of what an upper extent of the bevel (22) could be.

Hence, a re-evaluation of the previously cited prior art, necessitates re-opening of prosecution, in order to put forth the teachings of Yoshida et al., # 5,051,023.

Specifically Yoshida et al. illustrates in Figs. 2A, 2B, 4A-4D, that paving stones can be provided with either single or multiple tapering/beveling to enhance aesthetic features and prevent chipping/fracture of the paving blocks used to form a paved area.

Yoshida et al. further discloses the tapered areas can be formed as planar, inclined regions or rounded regions clearly illustrates the planar, inclined regions can have angular orientations both below  $15^{\circ}$  as seen at (2) in Fig. 4B, while other tapered regions (4) can have angular orientations greater than  $150^{\circ}$ , as at (4) in Fig. 4A. See Yoshida et al. Cols. 1-4, ln. 33.

Therefore, the argument is not persuasive.

Art Unit: 3671

Applicant then argues "Barth merely shows a paving block having a small upper bevel that is clearly outside Applicant's claimed range of zero to fifteen degrees".

However, Barth et al. provides no indication at all as to what the upper angular extent of the bevel could be. It is noted Applicant did not provide a fig. Col. or In., to support the cited allegation.

Rather Barth et al. only discloses the lowest extent of the bevel as being greater than zero degrees when a bevel (22) is provided. See col. 3, Ins. 1-33.

Therefore, the argument is not persuasive.

Applicant then asserts "that having the bevel (22) [of Barth et al.] oriented at an angle between 0-15 degrees relative to vertical would absolutely not promote a directing or funneling of water to the recesses".

However, **none of the claims require an angle relative to a vertical reference.**

Claims 20, 21 positively recite "a plane of said upper tapered portion intersecting the plane of its associated lower portion at an angle greater than 0 and less than 15 degrees".

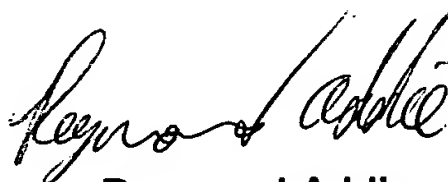
Hence, the angle formed by the upper tapered portion intersecting an imaginary plane of an associated lower portion, which in itself is vertical in orientation; can be measured from either the vertical or the horizontal, since neither reference is explicitly recited in the actual claim language.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 703 305-0135. The examiner can normally be reached on 8-2, 6-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703 308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Raymond Addie**  
**Patent Examiner**  
**Group 3600**

11/19/04